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THE OBLIGATIONS AND LIMITATIONS OF THE HIGH SCHOOL[1]

THE obligations of the high school arise from the relations of the high school to the student and to society. The relations of the high school to society are constituted primarily through the student, and therefore the obligations to the student may be made inclusive of the total obligations to the community. Therefore the relation of the high school to the student represents the theme.

The obligations of the high school to the student touch the student at an age that is called adolescence. The high school has committed to itself the boy or girl at an age of change, of growth, of development, of evolution, and of revolution. These changes touch every part of his being. The physical changes are the more impressive to the ear and to the eye, but they, significant as they are in themselves, are yet more significant of changes which neither the eye nor the ear can detect. Moods, strange and mysterious, seize the student. He becomes a new self. He is born again. New powers are given. New appetites are stirring. New ideals are formed. New strengths and new weaknesses are made known. Life's coat of many colors becomes, if brilliant, more brilliant, and if somber yet more

[1] An Address made at the Michigan Schoolmasters' Club, Ann Arbor, March 29, 1901.

somber. Life s pathetic and life's exultant relations are seen and felt. The gains and triumphs, the failures and the disasters of character are more accentuated. The student comes into an attitude of relationships. The past tells its story with new meanings, and the voices of the future are heard. The will, heart, and intellect, each stirred to its depths, find each peculiar difficulties in relating itself to the others. It is an age of will weakest and intellect least trained, and of appetite most insistent. It is a time of possibilities of highest results, but not without intimations also of blackest shame. By such signs these students know they stand at the parting of the ways, as in the ancient fable. If the choice now made be of righteousness, goodness, and truth, the future of truth, goodness, and righteousness is well assured; but if there be any jugglery or whiffling, the future of the boy becomes one of exceedingly great peril. To the student of this state and condition the high school makes its appeal.

The high school also makes its appeal to both boys and girls, but it is to be said that the appeal is made rather to girls than to boys. In the whole United States, the high schools, in 1899, graduated 20,344 boys and 36,124 girls. In the year 1898 the whole number of boys attending the public high schools was 189,187, and the whole number of girls 260,413.

The obligation of the high school, therefore, first in time and first in importance, let it be at once said, is the duty of teaching the student to think. To think is the first general duty of our educational process. But this duty rises and falls in different educational conditions and orders. In general it may be said that the duty of teaching the student to think increases as the educational process is prolonged. This duty is the least obligatory in the primary school; it is the greatest in the college. The first duty of the teacher in the primary school is to teach facts, and the first duty of the pupil in the primary school is to learn. The first duty of the teacher in the grammar school is also to teach facts, and the first duty of the student in the grammar school is to learn. Teaching begins with facts that appeal to the senses and progresses unto facts that appeal to the memory. But the relations of these facts emerge into an

importance in the grammar school which they did not have in the primary school, and also these relations emerge into larger importance with each passing year of the grammar school. At length in the high school the importance of the relations of facts comes to equal the importance of the facts themselves, and with each passing year of the high-school course the importance of the relations of facts increases and the importance of the facts themselves diminishes. This process, too, I may add in passing, continues in the college. The relations of truth rapidly increase in value with the increase of the length of the college course. The professional school is unique, and the relations of truth to the professional education do not here detain us at all.

Of course in teaching the student to think the high school uses truth. Truth is the food of the mind. Food nourishes the mind. Truth is the gymnastic of the mind. Truth strengthens the intellect. Truth is the atmosphere, the air, the oxygen of the mind. Truth moves and inspires intellect. As food which is proper in kind and amount is given to the mind the mind is nourished, and as food which is improper in kind and amount is given to the mind the mind is depressed. As a gymnastic which is proper or improper is offered for the exercise of the mind, so is the mind strengthened or weakened. But, be it remembered, both the food and the gymnastic are means; they are not ends. In education truth is the method or the means through the use of which the mind is trained to think.

To think, be it always affirmed, is the most useful power with which the high school can endow the student. Knowledge is not power. To think is power. The power to think is a power which is called into use with the greatest constancy, regularity, and significance. No power is used so much in time or space as the power of judgment. Knowlèdge vanishes and leaves not a wrack behind. It is well, indeed, in many cases for it to vanish. But the power to think never can vanish so long as the mind itself lasts. As Oliver Wendell Holmes, Chief Justice of Massachusetts, worthy son of a worthy father, in an address given at the two hundred and fiftieth anniversary of the founding of Harvard College, said:

> The main part of intellectual education is not the acquisition of facts, but learning how to make facts live. Culture, in the sense of fruitless knowledge, I for one abhor. The mark of a master is, that facts which before lay scattered in an inorganic mass, when he shoots through them the magnetic current of his thought, leap into an organic order and live and bear fruit.[1]

I have asked a good many graduates of the best high schools what their high schools ought to have done for them which they failed to do. I have been delighted to find in general satisfaction with the work of the high school. But whatever dissatisfaction I have found has been on the whole in relation to the high school not giving sufficient amount of truth for the reason of the students to work upon. Knowledge has been given in abundance, and, if you wish, in superabundance. But the opportunities for the developing of the power to think have not been sufficiently numerous.

The place of manual training in the high school herein emerges. Manual training usually assumes four forms, two for boys and two for girls. The boys work in either iron or wood and the girls work in either cloth or flour. Schools of the machinist and carpenter, and sewing schools or cooking schools represent the chief forms that manual training assumes. This education, which may be called the lower, is good. Of course it is good. It is good on any basis whatsoever. But these schools get their chief justification in not being schools manual but in being schools cerebral. If these schools train boys to put brains into their hands, they are first-rate. If they train the girl to put brains into her fingers, they are first-rate. If, however, they are training the boy or the girl to keep his brain within his skull, they are not so good as they ought to be. If they are muscular, they have a certain degree of strength and of value, but they do not have that strength or value which they do have if they are schools which embody the use of the gray matter of the brain. The temptation to make manual-training schools simply manual is exceedingly great. The teachers of chemistry and physics know also very well that a peril which they are obliged constantly to meet and contend with is the peril that the student fails

[1] Harvard College, Two Hundred and Fiftieth Anniversary, p. 67.

to raise himself from the mere mechanical doing of his experiments, into the intellectual doing of them. The student in the laboratory may be a mere mechanic quite as much as the carpenter in his shop. In the engineering or technical schools, as in the manual-training school of every grade, greatest value is to be found in disciplining the power to think. If they do not train the power to think, they are simply mechanical schools for the training not of scholars but of mechanics.

The place of the high school, too, as a means for fitting for college and for life applies at this point. The contrast between these two functions of the high school is often urged, and is often urged as embodying contradictory purposes. But no contrast should be made. The process which fits for life should be a process also which fits for college, and the process which fits for college should be also a process which fits for life as well. May not the process which is the best preparation for life be also the process which will be the best preparation for college? May not the process which is the best preparation for college be also the process which is the best preparation for life? Truth which is the best fitted to train the student to think is also that truth which is best fitted to train him for life, and the truth which is the best fitted to train the student for life is also that truth which is the best fitted to train him for an academic career. As is said in the report of the Committee on College Entrance Requirements for 1899, "We recommend that any piece of work comprehended within the studies included in this report that has covered at least one year of four periods a week in a well-equipped secondary school, under competent instruction, should be considered worthy to count toward admission to college."

But the man over whom the only result of the high school is to promote the power to think would emerge as a man lamentably incomplete and unfinished. Man is not, and is not intended to be, a multiplication table, not a Babbage's Calculating Machine, not an incarnate syllogism.

Therefore a second obligation of the high school is to promote an intellectual and an intelligent interest in life. Most boys and girls of the high school complete their education with

the high-school course. Most boys and girls, as a matter of fact, have completed their education before they entered the high school. Only about 5 per cent. of those who enter the primary schools enter the high school, and only about one third of those who enter the high school ever graduate at the high school. If the high-school boy go into the shop or factory or store, and if the high-school girl also go into the shop or factory or store, becoming a helper in their own or another home, to most of these boys and girls of the age of eighteen is set the purpose not to make a life but make a living. To make a living is a purpose never to be depreciated. The man who is not willing to make a living becomes a debtor to the community. He in fact has no right to live. He is a sort of communistic Ishmael. Only the communal grace suffers him to exist. The man, however, who makes a living is a creditor of the community. The community is the richer by reason of his struggle and his presence, but if he enrich the community in material good he is in peril of impoverishing himself in the higher relationships of his being. Experts of pathological insanity say to me that in the decay of the brain the higher functions, imagination and fancy, first give way. Their destruction is followed by the failure of the logical faculties, and the failure of these faculties is succeeded by that of recognition, and this power is presently followed by the decay of the physical senses. The process is the very reverse of the process of the building up of life in man which proceeds from the senses through reason to imagination. In one who is absorbed in making a living these higher faculties are in peril of not coming to their full flower and fruit, and the functions of these faculties are in peril of never finding their proper exercise and service. Living makes its most urgent appeal to the senses. Life makes its most impressive appeal to the soul, the imagination and reason. But the girl or the boy who is obliged at the age of eighteen to have for his chief concern the making of a living is in danger of coming into only a remote relation with these higher elements which constitute life itself. As principle is more important than method, and habit more important than *habitus*, and as soul is more important than memory, so the *life*

interests of the boy and the girl are the most precious. It was said of Eugene Field that he was the most continuously interesting man that one had met, and Matthew Arnold said of American life that it was not interesting. My contention is that the high school is under obligation to make every boy and girl continuously interesting, and also to make life itself interesting. My contention is that character and life are made interesting through the appeal of the higher elements and parts of being. My contention is in behalf of the unseen which is eternal, of the riches of the intellect which is higher than the riches material. My contention is in behalf not only of the transcendent and the transcendental but also in behalf of the human and the communal. Against sordid money making, in behalf of man's betterment, for the appreciation of beauty in sky and forest; in behalf of the love of the home, superior to the love for the office or for the club, be that club either feminine or other; for the love of the book, be that book history or story or poem, only provided it lift thought and purify feeling, my argument and my appeal are directed. To create such an intelligent and intellectual interest the high school is under obligation. Mencius divides men into four classes, says my friend Minister Wu. They are scholars, farmers, mechanics, and merchants. Most men will be either farmers, mechanics, or merchants. But if they are, in America, members of one of these three classes, they ought still to have the essential elements of scholars. The high schools should help the student to appreciate life other than the material and sensual. It should help him to appreciate, even if not to accomplish, the significance of that simple epitaph of Wordsworth, placed on the walls of that church wherein he worshiped and in the yard of which his mortal lies buried:

A true poet and philosopher, who by the special calling of Almighty God, whether he discoursed of man or nature, failed not to lift up the heart to holy things, tired not of maintaining the cause of the pure and simple, and so, in perilous times, was raised up to be a chosen minister not only of noblest poesy but of high and sacred truth.

Such a character and such a life the high school is under obligation to promote in every student.

The high school is under another obligation to which I shall simply refer. This duty I shall call a sense of values. The high school is under obligation of giving to each student a sense of the worth of certain great human conditions or forces. These conditions and forces I shall content myself with simply naming. The high school should teach each boy and girl the worth (1) of health; (2) of property; (3) of work; (4) of the minor graces as well as of the major virtues; (5) of the book; and (6) of man.

I now pass to the more important question of the means for fulfilling these obligations. The first means which I shall name is the course of study. To the length of the discussion respecting the course of study, going on in this country all these years, I do not now propose to make an addition. I wish, however, to say six things. (1) The course of study in the high school should be a course: It should be systematic. (2) It should be a course of study: It should represent labor. (3) It should be a course of studies: It should represent breadth. (4) It should be a course of studies which have for their purposes the securing of the highest purposes of being. (5) The course of study is founded on the assumption that different studies possess different values. (6) The course of study is founded on the further assumption that all studies, although having different values, in content, should yet be made as equivalent as possible as agencies and conditions for the training of the power to think and for the securing of all highest purposes of being.

Regarding these last two elements of which I have spoken, the two assumptions on which the course of study is founded, I do, however, wish to say a word.

Different studies, of course, train different faculties of the mind. And yet, different studies in training different faculties of the mind and so in bringing forth different results should, so far as possible, be made to possess equivalent intellectual values. All studies may be divided logically into those which relate directly to man, to nature, or to God. Those studies which relate directly to man are the linguistic, philosophical, sociological and

esthetic. Those which relate to nature, touching the constitution of matter, touching the laws of inorganic matter, touching the laws of organic matter, are called respectively chemistry, physics and biology. Herein also may for convenience be included mathematics. The linguistic studies of both the ancient and modern languages embody certain primary purposes. The purpose of studying Greek, for instance, is not so much to secure a knowledge of the Greek as to secure a philological training which sharpens the faculties of observation and of the reason, and also to lead one into an appreciation of the literature, government and the social institutions of one's own country. The purpose underlying the study of the two ancient languages which have most directly contributed to the betterment of our modern life is to increase the student's interest in the affairs of his own time, to give to him through a knowledge of the philosophy and history and literature of the peoples of Greece and Rome an appreciation of what is now occurring in his own time and to make him able to consider all historical and other phenomena as a part of the great history which began thousands of years ago and which is still in progress. In the study of modern languages the purpose may be to teach a knowledge of those tongues as tools, but it is also, and more, to secure a knowledge and acquaintance with the literature and the life of other nations than one's own. German literature, for instance, is a storehouse of some of the world's best thinking and is also the embodiment of Germany's highest ideals of life and character. In the study of English, the purposes that have controlled in the study of the languages of ancient peoples and of Romance and Teutonic peoples become yet more significant. These purposes may well be summed up in the word "appreciation." If poetry is studied, the aim is to appreciate the poet's thought, diction, melody, spirit, passion, and purpose, and to get as near as may be to the author's mind and heart. In one view literature is a branch of history, but in this view history is the servant of literature. The one comprehensive purpose in appreciation is to discipline and enrich the soul by the power and the beauty of the best writing and by the best interpretations of life. The literature of a nation is to a

large extent the expression of the social, religious and political life of the people.

The same condition, too, obtains largely in that branch of literature known as rhetoric or writing. Writing is self-expression, and through self-expression the self becomes larger and finer. Self-expression promotes clear and orderly thinking and clear and orderly thinking promotes largeness of character. Largeness of character, both as cause and result, signifies accurate observation, honest judgment, openness of mind, and logical thoughtfulness.

History, which is found as an enlarging part of the course of study, represents one of the most important means for the meeting of the great obligations of the high school. History is to be regarded as a matter of relations. By analogy and by comparison students should be taught that no event stands by itself. It is not a mechanical thing, but it is something which gains reality and meaning through other events and other processes. An event is one in a series of events, and a series of events may suggest the idea of a law, and the discovery of a law in events or acts is most impressive. In the study of history one comes to believe that there is no dead level of happenings but an orderly development. Events have lights and shades. Some events are more and some less important. Each has a value, but their values vastly differ. The student of history, too, is under obligation to cultivate the habit of examining phenomena without giving to personal elements undue weight, and also to seek in the phenomena themselves the means for understanding them. History, in a word, as found in the high school or in any institution, is designed to acquaint the student with the thoughts, the struggles, the failures and the triumphs of the great peoples of the world.

Philosophy fulfills a similar purpose, although possibly in a way less material. It also aims at an appreciation of relationships. In philosophy the student becomes interested in pure theory as such. The world is presented to the student as wrapped up in mystery and it cannot fail to arouse in him what the Greeks called "wonder" or "love of wisdom." It also

teaches the student to gain for himself that broader outlook on life which may not unfittingly be called "living for the universal." The student thinks out the deeper principles of life, and articulates for himself life's problems and summons himself with all his power these problems to solve. In the theory of knowledge he learns the nature of truth, in metaphysics the universal laws of nature and mind, in ethics the nature of the good, and in the philosophy of religion the nature of God. In psychology he learns those general laws of the mind's growth and health and activity which will make him see the part heredity and the daily life and environment play in actually creating our present and our future selves. In logic he is taught the significance of words and phrases and also he learns to think consistently.

It may be said that these great human principles also control in the teaching of such topics as mathematics and the physical sciences. For instance, in laboratory work in chemistry the student is taught to form his own judgments and to base his system of chemical laws, not upon the authority of a book or on the authority of his teacher but upon the results of his own observation. By means of experiments he is taught to observe results, to see the relations of cause and effect, and to draw his inferences from observed phenomena. He is, of course, himself as a simple student to grasp the great truths of nature's laws, truths that are infinitely more significant than the methods of any practical text-book or the intimations of any teacher, be he never so wise. The student is himself to gather ideas from nature. He is never to cram facts, nor to cover certain ground. He is to use the book and the laboratory tools as the carpenter uses his saw and his plane — for reaching a certain result.

These purposes, stated in language borrowed largely from interpretations made by my own colleagues, represent the great aims of a course of study, and the attaining of these aims represents the acquiring of the power to think, the getting of an intellectual and intelligent interest in life and the gaining, further, of a sense of valuation of the primary facts and forces of being.

When one has said this, he has also said that certain courses

in the high school in and of themselves do not have the value that certain other courses have. For instance, what is called the commercial or business course does not have a worth equivalent to that of the classical or modern language course. The business or commercial course is supposed to fit the student for business or commerce. In the gaining of this purpose the business or commercial course is a delusion and a snare. It is a delusion, for it deludes boys into the belief that it is fitting them to be business men. It is a snare, for it holds them in its meshes until the course is ended. What does the business or commercial course in the high school usually do for the student? On its business side, it teaches him bookkeeping and stenography. Of course bookkeeping and stenography are important, but neither bookkeeping, nor stenography, nor banking is of importance so great as it is for the boy in the high school to learn to think. The boy entering business needs to be able to think well, and he needs, second, to have some relation to life. Bookkeeping, stenography, and banking are arts and not sciences, and the art is never so good to arouse and to train the power to think, as the science. Reason, comparison, judgment, these represent education. Books that give information merely, or arts that give information only, are not the powers that give formation, and formation in the high school is always superior in value to information, as in practical ethics formation is better than reformation.

These statements touching the value of the business course receive confirmation in an address made by Professor Lodge at the last "graduation ceremonial" of the University of Edinburgh, held April 12, and reported in the *Scotsman* of the following day. I insert a paragraph from Professor Lodge's address as the proof-sheets are passing through my hands:

> So far as a business requires a special training, it is so special that it can only be acquired by actual contact with affairs; and so far as a business career requires a general training, it requires just the same sort of general training as is likely to command success in any other walk of life. The primary—not the sole—function of a university is to turn out its students with alert and well-trained minds, and such students will make short work of the languages or the office routine or any other preliminary to a successful business career.

Therefore I say, with reference to the course of study in the high school as the means and a method for securing the purposes of the high school and meeting the obligations of the high school, that it should be recognized that the different studies of the high school have different values, and yet that they should be made as nearly as possible of equivalent value, for the training of the thinker, for the arousing of an intelligent and intellectual interest in life, and for the interpretation of the great values of human facts and forces.

A method more significant than the course of study for the meeting of the great obligations of the high school rests in the teacher. More significant than the course of study, more impressive than the buildings, more valuable than systematic methods of instruction, is that being whom we call the teacher. With regard to the teacher, suffer me, with the utmost brevity, to say seven things. The good teacher is (1) to put himself in the pupil's place. He is to embody intellectual sympathy. (2) The good teacher is to know the relations of his subjects. He is to be a broad scholar. (3) The good teacher loves his students. He is altruistic. (4) The good teacher has aptness for teaching. He embodies simplicity. (5) The good teacher has intellectual and executive facility. He does things. (6) The good teacher has enthusiasm for humanity. His heart is warm. (7) The good teacher has greatness of personal being. He has a strong will and large nature. These, it seems to me, are the seven holy notes that make up that holy being, whom we call the teacher.

I have as a student known at least five great teachers. One of them, of Phillips Andover Academy, able, enthusiastic, succinct in question, swift in movement, suggestive of relations, keen of eye; in denunciation strong and terrible as the snakes that crushed Laocoon and his sons. Another, a teacher of history, priding himself in never knowing a date and yet knowing conditions, searching ever for causes and consequences, studying tides and movements and not the waves of events, a genuine interpreter of the ways of man to men. A third, quiet and analytic, whose fire seldom broke forth, but whose force was the more significant because of its concealment; loving his students,

following them in the severity of love, and ever inspiring them to the best. A fourth, impressive in suggestion, analyzing truth into truths, knowing deeply, nobly, broadly, an optimist, determined to make his faith the faith of his students. A fifth, who saw out of his students' eyes, whose vision was large, who loved his boys and all, facile, eager, alert, a Jupiter without his thunderbolts but always with his lightning flashes.

Such men as teachers we are to get. To get them is the problem. It is the problem of humanity. It is the problem of God, as well as of the school board and the school committee and the school superintendent. But to get men like these is the great method for helping the high school to fulfill its obligations.

You are now prepared to excuse me, before speaking in detail of the limitations of the high school. You will be more than content for me to say that the limitations of the high school arise from the limitations of humanity, and in particular from the limitations of the pupil. In detail, the limitations arise (1) from the lack of interest on the part of the pupil; (2) from the lack of interest on the part of the teacher for the pupil; (3) from the lack of proper and adequate compensation for the teacher; (4) from the lack of the power to teach on the part of the teacher; (5) from the poverty of the homes of the pupils; and (6) from the absorption of the pupil in social relations.

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